

March 16, 2007

2007 MULTIDISTRICT PROJECT SOLICITATION
THE CARL MOYER MEMORIAL
AIR QUALITY STANDARDS ATTAINMENT PROGRAM

California Air Resources Board
March 16, 2007

Table of Contents

I. BACKGROUND	1
II. ELIGIBLE PROJECTS	1
III. AVAILABLE FUNDING	3
IV. DEFINITIONS	4
V. APPLICATION REQUIREMENTS	5
VI. APPLICATION PROCESS	5
VII. APPLICANT WORKSHOP	10
VIII. MONITORING AND REPORTING REQUIREMENTS	10
IX. DISBURSEMENT OF FUNDS	11
X. CONTACT PERSON	11
ON-ROAD HEAVY-DUTY VEHICLE PROJECT APPLICATION	Appendix A
MARINE VESSEL PROJECT APPLICATION	Appendix B
LOCOMOTIVE PROJECT APPLICATION	Appendix C
OFF-ROAD EQUIPMENT PROJECT APPLICATION	Appendix D
AUXILIARY POWER UNITS AND OTHER IDLE REDUCTION TECHNOLOGIES APPLICATION	Appendix E
TRANSPORT REFRIGERATION UNIT APPLICATION	Appendix F
PILOT RETROFIT VOUCHER PROGRAM FOR ON-ROAD HEAVY-DUTY VEHICLE APPLICATION	Appendix G
PILOT VOUCHER PROGRAM FOR OFF-ROAD CONSTRUCTION EQUIPMENT APPLICATION	Appendix H
PROJECT IMPLEMENTATION PLAN	Appendix I

I. BACKGROUND

Although they comprise a small percentage of all mobile and portable engines in California, diesel engines produce approximately 50 percent of the emissions of oxides of nitrogen (NOx) in addition to combustion-generated particulate matter (PM) from such engines. NOx is a constituent of smog and PM is linked to a wide range of serious health problems. Diesel PM has also been classified as a toxic air contaminant capable of causing cancer. Over time these emissions are decreasing as older diesel engines are retired and replaced with newer models meeting more stringent emission standards. However, the turnover rate for diesel engines is slow so the full benefits of cleaner technologies will not be realized for decades. The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) helps address this problem by providing monetary incentives to encourage owners of heavy-duty diesel engines to reduce emissions by replacing their engines with cleaner models or retrofitting with low-emitting technologies.

Since its initial implementation in 1998, the Carl Moyer Program has helped replace approximately 7,000 dirty diesel engines resulting in NOx and PM reductions of eighteen tons per day and one ton per day, respectively.

Although the Air Resources Board (ARB) is responsible for developing the Carl Moyer Program Guidelines, it is the participating air pollution control districts and air quality management districts (air districts) that actually administer the program. Most air districts require all or most of the project's operation to take place within their district boundaries so the benefits accrue locally. Consequently, many worthwhile eligible projects have difficulty getting funded because they operate in more than one air district.

Section 44286 of the Health and Safety Code directs ARB to provide for such multidistrict projects. In accordance with this section, ARB may earmark up to ten percent of the program's funding for multidistrict projects. This solicitation seeks projects that qualify for this multidistrict funding: projects that operate in more than one air district or that impact air quality in more than one air district as a result of air pollutant transport.

II. ELIGIBLE PROJECTS

The 2007 Multidistrict Project Solicitation is directed at providing monetary grants to offset the incremental cost of reduced emission technologies **only** in the following project categories:

- Goods movement projects, including:
 - marine vessels and locomotives
 - off-road equipment permanently located at a maritime port or rail yard, and
 - on-road heavy-duty vehicles that transport cargo to and from a maritime port or rail yard (at least 400 annual trips to a port or rail yard);

- Off-road construction equipment and mobile agricultural equipment that operate in more than one air district;
- PM retrofit devices that also get NOx reductions for on-road heavy-duty vehicles that operate in more than one air district;
- Zero-emission idle reduction technologies for any model year on-road heavy-duty vehicles operating in more than one air district, or Level 3 PM retrofit for an APU equipped with a certified engine and installed in a 2006 model year or older on-road heavy-duty vehicle operating in more than one air district;
- Level 3 PM retrofit or alternative technologies for transport refrigeration units (TRU) on vehicles or equipment operating in more than one air district.

The project categories listed above represent the typical multidistrict projects, similar to previous years' multidistrict solicitations. This 2007 Multidistrict Project Solicitation includes an additional project category. The additional project category is for the development and implementation of pilot voucher programs for the following sources:

- Pilot retrofit voucher program for on-road heavy-duty vehicles operating in more than one air district; and
- Pilot voucher program for off-road construction equipment owned by small businesses.

The pilot voucher programs are new elements of the multidistrict solicitation and are limited to the control strategies listed above. There are several reasons for including the pilot voucher programs in this multidistrict solicitation. One is to determine if it is feasible and practical to develop a voucher program for certain project categories that would satisfy the basic tenets of the Carl Moyer Program, such as cost-effectiveness and surplus emissions reductions that are quantifiable and enforceable. Another reason is to evaluate approaches that would streamline the application evaluation process to reduce the time and effort that an applicant would need to expend, but that would still ensure that the project meets the minimum criteria specified in the Carl Moyer Guidelines. Yet another reason is to assess how a voucher program would need to be developed and administered to ensure that the funding process could be expedited for certain Moyer-eligible projects. ARB staff anticipates using the results from these pilot voucher programs to further our understanding of the possibilities and limitations when considering how to incorporate a voucher-type project category into the Carl Moyer Program in the future. Due to the anticipated difficulty of developing, administering, and implementing this type of program, only air districts that have had experience with administering the Carl Moyer Program will be eligible to apply to the pilot voucher program solicitation. Additional administrative funds to assist the air district in implementing the voucher program(s), up to \$50,000 for each voucher program, would be available if requested by the air district.

Except for marine vessel projects and retrofit voucher projects for on-road heavy-duty vehicles, 75 percent of all fuel consumed or miles traveled must occur within California during the life of the project. ARB could waive this requirement, if

necessary, on a case-by-case basis. Eligible engines for vehicles and equipment must be rated at 25 horsepower or greater, except for engines used in APUs and TRUs. All projects must provide at least three years of emission reductions that are surplus to all applicable rules, regulations and requirements. This includes, but is not limited to, in-use fleet rules affecting cargo handling equipment, TRUs, auxiliary power units used when trucks idle, and off-road vehicles/equipment. Regulations for these source categories are either already in effect or are being considered by the ARB.

Of particular relevance is an upcoming regulation intended to reduce diesel PM emissions from in-use (existing) off-road vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The proposed in-use off-road vehicle regulation is currently scheduled for the Board's consideration in May 2007. *Prospective applicants need to be aware that even if the project they submitted in response to this 2007 multidistrict solicitation was selected for funding, if the contract is not fully executed (i.e., contract signed by both the applicant and the primary air district) prior to the adoption date of the regulation, any funding that was approved for the proposed project could be rescinded, depending on the actual regulatory requirements.*

All projects must also comply with the January 6, 2006, Carl Moyer Program Guidelines, the 2006 Carl Moyer Program Advisories, and the specific requirements of this solicitation. The January 6, 2006, Carl Moyer Program Guidelines and the 2006 Carl Moyer Program Advisories are available at: <http://www.arb.ca.gov/msprog/moyer/moyer.htm>.

III. AVAILABLE FUNDING

ARB has earmarked up to \$8,496,000 for multidistrict projects. These funds specifically target projects of the types listed above that qualify for the Carl Moyer Program and impact air quality in at least two air districts. The available multidistrict funds are to be allocated as follows. Fifty percent (50%) of the funds (\$4,248,000) will be used to fund multidistrict projects that impact areas disproportionately affected by air pollution, i.e., environmental justice areas. Up to \$1,500,000 will be used for projects to develop and implement pilot voucher programs covering these areas: emission control system retrofits for on-road heavy-duty vehicles operating in more than one air district; and off-road construction equipment owned by small businesses. The remaining \$2,748,000 will be used for all other eligible multidistrict projects as described in this solicitation. ARB reserves the right to reallocate funding among categories if sufficient qualifying proposals are not received in any category. The available funding for each project category is summarized in the table below. In addition, depending on funding availability, the actual amount of funds that is set aside for each project category shown in the table below may be increased.

<u>Available Funds</u>	<u>Project Category</u>
\$1,000,000	Pilot Retrofit Voucher Program: On-road Heavy-Duty Vehicles
\$500,000	Pilot Voucher Program: Off-road Construction Equipment
\$6,996,000	Multidistrict Projects
Total: \$8,496,000	

IV. DEFINITIONS

The following definitions apply to the terms used to describe the requirements for the 2007 Carl Moyer Program Multidistrict Project Solicitation:

1. Air district - Air pollution control district or air quality management district.
2. Applicant - Local air pollution control districts or air quality management districts and private entities that apply directly or through an air district. Private applicants must own and control the equipment for which the grant is being requested. The private applicant may be an individual, a partnership, a corporation, a cooperative, or any other legal entity that is directly responsible for equipment purchase and operation. Anyone who owns 20 percent or more of the applicant business is considered to be an applicant principal. All applicant principals must provide financial disclosure. The private applicant must designate a main contact person for the proposal. The main contact person must have the legal authority to submit progress reports and sign legal documentation on behalf of all the applicant principals. The private applicant must be authorized to do business in the State of California and be in good tax standing with the California Franchise Tax Board. No third party applications will be accepted.
3. Cost-effectiveness – The cost of reducing a weighted ton of emissions. A weighted ton consists of NO_x plus ROG plus twenty times combustion PM.
4. Incremental cost - The difference in cost between the reduced emission engine or technology and the baseline engine or technology.
5. Multidistrict project – A project involving vehicle/equipment that operates in more than one air district.
6. Primary air district - Air district containing applicant's headquarters, main operating station, or depot, or the air district in which the vehicle or engine operates the largest portion of time.
7. Qualifying project – Vehicles or equipment meeting the requirements of all the applicable criteria specified in the January 6, 2006, Carl Moyer Program Guidelines, the 2006 Carl Moyer Program Advisories, and this solicitation.

8. Small Business – For the purpose of this multidistrict solicitation, a small business is defined, pursuant to Government Code Section 14837, as an independently owned and operated business, which is not dominant in its field of operation, the principal office of which is located in California, the officers of which are domiciled in California, and which, together with affiliates, has 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or is a manufacturer with 100 or fewer employees.
9. Verification Procedure, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines (Verification Procedure – The ARB regulatory procedure codified in Title 13, CCR, Sections 2700-2710, which is incorporated herein by reference, that engine manufacturers, sellers, owners, or operators may use to verify the reductions of diesel PM or NOx from in-use diesel engines using a particular emission control strategy.
10. Verified Diesel Emission Control Strategy – An emission control strategy, designed primarily for the reduction of diesel PM emissions, which has been verified pursuant to the Verification Procedure.
11. Voucher Program – A program that provides a direct financial incentive (in the form of a grant, or voucher) to an owner of an eligible vehicle or equipment, for the expressed purpose of fully or partially offsetting the cost to install a verified retrofit device or other approved emission control strategies in such vehicle or equipment.

V. APPLICATION REQUIREMENTS

Projects must meet the specific requirements stated in this solicitation and all applicable criteria in the January 6, 2006, Carl Moyer Program Guidelines and the 2006 Carl Moyer Program Advisories. Applicants must meet these criteria and fully complete project applications (found in Appendices A through H) including the Project Implementation Plan (Appendix I) to be considered for project funding. Incomplete applications or proposals not meeting the minimum requirements may not receive consideration.

ARB staff may request additional information during the application review process, if needed. Additional copies of this application form are available at: <http://www.arb.ca.gov/msprog/moyer/moyer.htm>.

VI. APPLICATION PROCESS

Applications will be screened to determine that: (1) the application is complete; (2) the projects are multidistrict as defined above; (3) the cost-effectiveness will be no more than \$14,300 per weighted ton of NOx plus ROG plus twenty times combustion PM reduced; (4) the technology is commercially available and is

certified or verified where applicable; and (5) the emission reductions are real, surplus, quantifiable and enforceable. Locomotive projects will be required to install electronic monitoring unit(s) (EMU). The cost of the EMU is an eligible expense for Carl Moyer Program funding and may be added to the incremental cost difference when calculating the cost-effectiveness. Other projects, e.g., retrofit voucher projects for on-road heavy-duty vehicles, may also be required to install an EMU.

Applications must be complete and accurate. Omissions, inaccuracies or misstatements may be cause for rejection of a proposal. Costs incurred for developing proposals and in anticipation of award are entirely the responsibility of the applicant and shall not be charged to the State of California.

Three copies of the application packet must be signed by the applicant(s) and must be received by ARB **no later than 5:00 PM April 27, 2007**. Please note that postmark dates will not suffice to meet the stated deadline. Late applications will **not** be accepted. Applications that are not signed by the applicant or that are sent via facsimile or email will **not** be accepted. Applications can be mailed or hand delivered to the following address:

U.S. Postal Service Deliveries

Ms. Grace Garcia
Air Resources Board
Mobile Source Control Division
P.O. Box 2815
Sacramento, CA 95812

Hand Deliveries

Ms. Grace Garcia
Air Resources Board
Mobile Source Control Division
1001 I Street
Sacramento, CA 95814

A. Project Evaluations and Scoring Guidelines

The ARB will conduct an evaluation of each qualifying project based on the evaluation criteria described below. ARB, or its designee, reserves the right to inspect any project prior to selection. The maximum score is 100 points. Qualifying projects with the highest overall scores will be eligible for funding. Funds will be distributed in the following order:

1. \$1.5 million is earmarked for pilot voucher programs, of which \$1 million will be set aside for on-road heavy-duty vehicles that operate in more than one air district, and \$500,000 will be used for off-road construction equipment from small businesses. Voucher program applications will be ranked according to the voucher program scoring criteria.
2. ARB will work with local air districts to evaluate how projects impact areas disproportionately affected by air pollution. Projects that are designated as environmental justice projects will be separated from all other projects. These projects will be scored according to the

scoring criteria, and \$4,248,000 will fund the highest ranking projects in this project pool.

3. The remaining multidistrict projects not evaluated as environmental justice projects will be ranked according to the scoring criteria and \$2,748,000 will go to fund the highest ranking projects in this pool.

Applicants must disclose if they have already applied for Carl Moyer Program funds or other grant funds, including tax credits or deductions, grants, or any other public financial assistance given for the vehicles, equipment or engines listed in this application. ARB staff will coordinate with the local air district to ensure that the same vehicle or equipment is not funded through the Carl Moyer Program and through this solicitation. The applicant must reduce the incremental cost of the project by the amount of any current financial incentive received. If the proposed project received funds from this multidistrict solicitation, all of the emissions reductions resulted from implementing the proposed project would be claimed by the Carl Moyer Program, regardless of any other funding sources for the project. Any applicant failing to report additional funding for this project may be banned from future participation in the Carl Moyer Program and be subject to criminal sanctions.

The owner of the engine must sign and agree to the application. A third party (e.g., an engine dealer or distributor) may complete an application or part of an application on behalf of the owner. In this case, the third party must disclose their participation, as well as any payment received for their service.

If the application is incomplete, the applicant will be notified as to what information is missing within five business days of the closing date of the solicitation. The applicant will have 14 business days to provide ARB the missing information. If the information is not provided within this timeframe, the application will not be evaluated.

Due to significant differences in the typical Carl Moyer multidistrict projects and the pilot voucher projects; there will be separate evaluation and scoring criteria for each of these two project types. The evaluation and scoring criteria are shown below. In the case of a tie, the project with the better cost-effectiveness will be funded first until funds are exhausted.

1. All Multidistrict Project Categories (Except Pilot Voucher Projects)

(a) Cost-Effectiveness – (maximum 45 points)

Cost-effectiveness will be calculated based on reductions of NOx, ROG and twenty times combustion PM, as described in the Carl Moyer Program Guidelines. The following chart shows the point rating system:

<u>Cost-Effectiveness Range</u> <u>(\$ per weighted ton)</u>	<u>Points Awarded</u>
More than \$14,300	0 point
\$11,300 - \$14,300	9 points
\$8,300 - \$11,299	18 points
\$5,300 - \$8,299	27 points
\$2,300 - \$5,299	36 points
Less than \$2,300	45 points

(b) Project Implementation Plan – (maximum 15 points)

- Clear timeline for project completion. (4 points)
- Reasonableness of work plan timeline. How quickly the project can be completed; projected delivery date. (4 points)
- Long-term benefits. Likelihood and duration of continued surplus reductions beyond project life. (7 points)

(c) Need for Multidistrict Funding - (maximum 10 points)

- Projects that have vehicle or equipment operating in three or more air districts will receive 10 points.

(d) Small-Business Projects - (maximum 10 points)

- Projects from eligible small businesses as defined in Section IV will receive 10 points.

(e) Zero-Emission Projects - (maximum 10 points)

- Projects in which the lower-emission technology is zero-emitting will receive 10 points.

(f) Application Completeness – (maximum 10 points)

Points will be given out based on completeness of application at the closing date of the solicitation.

- Applications missing critical information to evaluate cost-effectiveness, such as technology information or quotes. (0 points)
- Applications that are not complete, such as missing signatures or historical use documentation, but have enough information to evaluate the cost-effectiveness of the project. (5 points)

- Complete applications (10 points)

2. Pilot Voucher Program

(a) Program Development and Administration Plan - (maximum 20 points)

- Clear timeline for project completion. (5 points)
- Reasonableness of work plan timeline. How quickly the project can be completed; projected delivery date. (5 points)
- History of contracted parties/participants. Experience completing similar projects on time and within budget. (10 points)

(b) Project Implementation Plan – (maximum 30 points)

- A plan on how the voucher program will be implemented. (15 points)
- A plan for how the retrofit system that was installed with funding from this pilot voucher program is to be maintained and monitored, in compliance with the device manufacturer's recommendations. (10 points)
- A plan on how the applicant intends to outreach and market the voucher program to eligible vehicle or equipment owner. (5 points)

(c) Cost-Effectiveness - (maximum 30 points).

The maximum cost-effectiveness for each retrofit voucher project will be \$14,300 per weighted ton of surplus emissions reduction. Cost-effectiveness will be calculated based on reductions of NO_x, ROG and twenty times combustion PM, as described in the Carl Moyer Program Guidelines. The applicant must submit a plan showing how the program will be designed to adhere to the cost-effectiveness requirement and maximize the number of retrofit device installed for a given amount of funding received for each voucher project.

(d) Environmental Justice - (maximum 10 points)

- A plan on how the applicant intends to attract projects that are located primarily in areas disproportionately affected by air pollution to participate in the voucher program. (10 points)

(e) Application Completeness – (maximum 10 points)

Points will be given out based on completeness of application at the closing date of the solicitation.

- Applications missing critical information to evaluate cost-effectiveness, such as technology information or quotes. (0 points)

- Applications that are not complete, such as missing signatures or historical use documentation, but have enough information to evaluate the cost-effectiveness of the project. (5 points)
- Complete applications (10 points)

VII. APPLICANT WORKSHOP

An applicant workshop will be held Friday, March 30, 2007, from 1:00 p.m. to 4:00 p.m. in the Coastal Hearing Room at the Air Resources Board facility located at 1001 I Street, Sacramento, California. Applicants choosing to participate may do so in person or via conference call. The call-in number is (888) 373-3590 and the participant code is 62343. The intent of the workshop is to provide potential project applicants with an opportunity to ask clarifying questions regarding general project requirements and specific technology questions. Written questions submitted before the workshop will be given priority. Questions may be e-mailed to Ms. Grace Garcia at ggarcia@arb.ca.gov, or faxed to Ms. Garcia at (916) 322-3923. Questions may be submitted up to the close of business Friday, March 23, 2007. The questions and answers will be posted on the ARB website no later than Friday, April 6, 2007. Questions asked after the workshop will be answered and posted on the internet on a staff availability basis. Any verbal communication with an ARB employee concerning this solicitation is not binding on the State and shall in no way alter a specification, term or condition of the solicitation.

VIII. MONITORING AND REPORTING REQUIREMENTS

- Grant awardees must maintain data for the life of the project (at least 3 years).
- Except for the voucher program, grant awardees must submit annual reports to the managing air district during the project term. Grant awardees for the voucher program must submit annual reports to the ARB. In all cases, the report shall contain all information required by the managing air district including appropriate documentation, such as fuel receipts or hour meter readings, confirming usage during the project life, and any required maintenance service, as applicable. Annual proof of insurance is also required. Grant awardees must inform the managing air district (or the ARB in the case of the voucher program), in writing, of any change of ownership or disruption in project operation which could impact usage.
- In addition to annual reports, grant awardees for the pilot voucher program must submit quarterly progress reports to the ARB during the project term, with the fourth quarterly progress report being satisfied by the required annual report. The quarterly reports shall contain brief summary of the status of the pilot voucher program such as number of vouchers provided, amount of grant expended, remaining grant, as well as any issues that were identified during the implementation phase of the voucher program.

- Grant awardees must provide the above information in the required reporting format. ARB reserves the right to inspect all funded projects with 48-hour notice for the duration of the contract.

IX. DISBURSEMENT OF FUNDS

Final project selection will be completed by June 1, 2007, and successful applicants will be notified immediately. All projects, whether submitted by individuals or local air districts, will be administered by the primary air district. Project awards will be made through a grant agreement between the ARB and the air district. Once the grant award process has been fully executed, payment will be made through a grant disbursement to the air districts. Project applicants must then enter into a formal agreement with the local air district. The Grantee must complete the project by June 30, 2009.

X. CONTACT PERSON

Please contact Ms. Grace Garcia for questions relating only to the administration and processing of this solicitation. All other questions will be addressed at the applicant workshop. Ms. Garcia may be reached at:

Ms. Grace Garcia
Mobile Source Control Division
Air Resources Board
1001 I Street
Sacramento, CA 95814
Phone: (916) 323-2781
Fax: (916) 322-3923